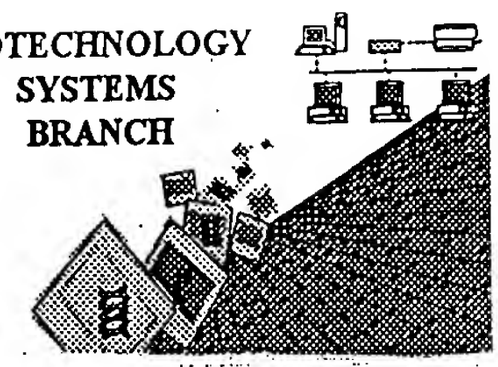
M. Wallaka

#28
29

BIOTECHNOLOGY SYSTEMS BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/424,686D
Source: 1600
Date Processed by STIC: 3/19/03

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PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
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Revised 01/29/2002

Does Not Comply
Corrected Diskette Needed

1600

RAW SEQUENCE LISTING DATE: 03/19/2003
PATENT APPLICATION: US/09/424,686D TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

4 <110> APPLICANT: Hagen, Gustav
5 Siegmund, Hans-Ulrich
6 Weichel, Walter
7 Wick, Maresa
8 Zubov, Dmitry
10 <120> TITLE OF INVENTION: Human Catalytic Telomerase Sub-Unit and its Diagnostic and
11 Therapeutic Use
13 <130> FILE REFERENCE: Bayer 10,203
15 <140> CURRENT APPLICATION NUMBER: US 09/424,686D
17 <141> CURRENT FILING DATE: 1999-11-29
19 <150> PRIOR APPLICATION NUMBER: PCT/EP98/03468
21 <151> PRIOR FILING DATE: 1998-06-09
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25 <170> SOFTWARE: Microsoft Word

ERRORED SEQUENCES

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37 aggtgctgcc gctggccacg ttcgtgcggc gcctggggcc ccagggctgg cggctggtgc 180
39 agcgcgggga cccggcggct ttccgcgcgc tggtggccca gtgcctggtg tgcgtgccct 240
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RAW SEQUENCE LISTING DATE: 03/19/2003
PATENT APPLICATION: US/09/424,686D TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

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     153 <213> ORGANISM: Homo sapiens
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     157      1               5                   10                  15
     159      His Tyr Arg Glu Val Leu Pro Leu Ala Thr Phe Val Arg Arg Leu Gly
     160                  20                  25                  30
     162      Pro Gln Gly Trp Arg Leu Val Gln Arg Gly Asp Pro Ala Ala Phe Arg
     163              35                  40                  45
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RAW SEQUENCE LISTING DATE: 03/19/2003
PATENT APPLICATION: US/09/424,686D TIME: 13:04:52

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Output Set: N:\CRF4\03192003\I424686D.raw

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Pro Pro Ala Ala Pro Ser Phe Arg Gln Val Ser Cys Leu Lys Glu Leu
65                  70                  75                  80
Val Ala Arg Val Leu Gln Arg Leu Cys Glu Arg Gly Ala Lys Asn Val
                85                  90                  95
Leu Ala Phe Gly Phe Ala Leu Leu Asp Gly Ala Arg Gly Gly Pro Pro
            100                 105                 110
Glu Ala Phe Thr Thr Ser Val Arg Ser Tyr Leu Pro Asn Thr Val Thr
        115                 120                 125
Asp Ala Leu Arg Gly Ser Gly Ala Trp Gly Leu Leu Leu Arg Arg Val
    130                 135                 140
Gly Asp Asp Val Leu Val His Leu Leu Ala Arg Cys Ala Leu Phe Val
145                 150                 155                 160
Leu Val Ala Pro Ser Cys Ala Tyr Gln Val Cys Gly Pro Pro Leu Tyr
                165                 170                 175
Gln Leu Gly Ala Ala Thr Gln Ala Arg Pro Pro Pro His Ala Ser Gly
            180                 185                 190
Pro Arg Arg Arg Leu Gly Cys Glu Arg Ala Trp Asn His Ser Val Arg
        195                 200                 205
Glu Ala Gly Val Pro Leu Gly Leu Pro Ala Pro Gly Ala Arg Arg Arg
    210                 215                 220
Gly Gly Ser Ala Ser Arg Ser Leu Pro Leu Pro Lys Arg Pro Arg Arg
225                 230                 235                 240
Gly Ala Ala Pro Glu Pro Glu Arg Thr Pro Val Gly Gln Gly Ser Trp
                245                 250                 255
Ala His Pro Gly Arg Thr Arg Gly Pro Ser Asp Arg Gly Phe Cys Val
            260                 265                 270
Val Ser Pro Ala Arg Pro Ala Glu Glu Ala Thr Ser Leu Glu Gly Ala
        275                 280                 285
Leu Ser Gly Thr Arg His Ser His Pro Ser Val Gly Arg Gln His His
    290                 295                 300
Ala Gly Pro Pro Ser Thr Ser Arg Pro Pro Arg Pro Trp Asp Thr Pro
305                 310                 315                 320
Cys Pro Pro Val Tyr Ala Glu Thr Lys His Phe Leu Tyr Ser Ser Gly
                325                 330                 335
Asp Lys Glu Gln Leu Arg Pro Ser Phe Leu Leu Ser Ser Leu Arg Pro
            340                 345                 350
Ser Leu Thr Gly Ala Arg Arg Leu Val Glu Thr Ile Phe Leu Gly Ser
        355                 360                 365
Arg Pro Trp Met Pro Gly Thr Pro Arg Arg Leu Pro Arg Leu Pro Gln
    370                 375                 380
Arg Tyr Trp Gln Met Arg Pro Leu Phe Leu Glu Leu Leu Gly Asn His
385                 390                 395                 400
Ala Gln Cys Pro Tyr Gly Val Leu Leu Lys Thr His Cys Pro Leu Arg
                405                 410                 415
Ala Ala Val Thr Pro Ala Ala Gly Val Cys Ala Arg Glu Lys Pro Gln
            420                 425                 430
Gly Ser Val Ala Ala Pro Glu Glu Glu Asp Thr Asp Pro Arg Arg Leu
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RAW SEQUENCE LISTING DATE: 03/19/2003
PATENT APPLICATION: US/09/424,686D TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

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     240  Val Gln Leu Leu Arg Gln His Ser Ser Pro Trp Gln Val Tyr Gly Phe
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     243  Val Arg Ala Cys Leu Arg Arg Leu Val Pro Pro Gly Leu Trp Gly Ser
     244  465                 470                 475                 480
     246  Arg His Asn Glu Arg Arg Phe Leu Arg Asn Thr Lys Lys Phe Ile Ser
     247                485                 490                 495
     249  Leu Gly Lys His Ala Lys Leu Ser Leu Gln Glu Leu Thr Trp Lys Met
     250                500                 505                 510
     252  Ser Val Arg Asp Cys Ala Trp Leu Arg Arg Ser Pro Gly Val Gly Cys
     253                515                 520                 525
     255  Val Pro Ala Ala Glu His Arg Leu Arg Glu Glu Ile Leu Ala Lys Phe
     256      530                 535                 540
     258  Leu His Trp Leu Met Ser Val Tyr Val Val Glu Leu Leu Arg Ser Phe
     259  545                 550                 555                 560
     261  Phe Tyr Val Thr Glu Thr Thr Phe Gln Lys Asn Arg Leu Phe Phe Tyr
     262                565                 570                 575
     264  Arg Lys Ser Val Trp Ser Lys Leu Gln Ser Ile Gly Ile Arg Gln His
     265                580                 585                 590
     267  Leu Lys Arg Val Gln Leu Arg Glu Leu Ser Glu Ala Glu Val Arg Gln
     268                595                 600                 605
     270  His Arg Glu Ala Arg Pro Ala Leu Leu Thr Ser Arg Leu Arg Phe Ile
     271      610                 615                 620
     273  Pro Lys Pro Asp Gly Leu Arg Pro Ile Val Asn Met Asp Tyr Val Val
     274  625                 630                 635                 640
     276  Gly Ala Arg Thr Phe Arg Arg Glu Lys Arg Ala Glu Arg Leu Thr Ser
     277                645                 650                 655
     279  Arg Val Lys Ala Leu Phe Ser Val Leu Asn Tyr Glu Arg Ala Arg Arg
     280                660                 665                 670
     282  Pro Gly Leu Leu Gly Ala Ser Val Leu Gly Leu Asp Asp Ile His Arg
     283                675                 680                 685
     285  Ala Trp Arg Thr Phe Val Leu Arg Val Arg Ala Gln Asp Pro Pro Pro
     286      690                 695                 700
     288  Glu Leu Tyr Phe Val Lys Val Asp Val Thr Gly Ala Tyr Asp Thr Ile
     289  705                 710                 715                 720
     291  Pro Gln Asp Arg Leu Thr Glu Val Ile Ala Ser Ile Ile Lys Pro Gln
     292                725                 730                 735
     294  Asn Thr Tyr Cys Val Arg Arg Tyr Ala Val Val Gln Lys Ala Ala His
     295                740                 745                 750
     297  Gly His Val Arg Lys Ala Phe Lys Ser His Val Ser Thr Leu Thr Asp
     298                755                 760                 765
     300  Leu Gln Pro Tyr Met Arg Gln Phe Val Ala His Leu Gln Glu Thr Ser
     301      770                 775                 780
     303  Pro Leu Arg Asp Ala Val Val Ile Glu Gln Ser Ser Ser Leu Asn Glu
     304  785                 790                 795                 800
     306  Ala Ser Ser Gly Leu Phe Asp Val Phe Leu Arg Phe Met Cys His His
     307                805                 810                 815
     309  Ala Val Arg Ile Arg Gly Lys Ser Tyr Val Gln Cys Gln Gly Ile Pro
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RAW SEQUENCE LISTING DATE: 03/19/2003
PATENT APPLICATION: **US/09/424,686D** TIME: 13:04:52

Input Set : **A:\PTO.VSK.txt**
Output Set: **N:\CRF4\03192003\I424686D.raw**

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316          850                 855                 860
318      Arg Leu Val Asp Asp Phe Leu Leu Val Thr Pro His Leu Thr His Ala
319      865                 870                 875                 880
321      Lys Thr Phe Leu Arg Thr Leu Val Arg Gly Val Pro Glu Tyr Gly Cys
322                      885                 890                 895
324      Val Val Asn Leu Arg Lys Thr Val Val Asn Phe Pro Val Glu Asp Glu
325                   900                 905                 910
327      Ala Leu Gly Gly Thr Ala Phe Val Gln Met Pro Ala His Gly Leu Phe
328               915                 920                 925
330      Pro Trp Cys Gly Leu Leu Leu Asp Thr Arg Thr Leu Glu Val Gln Ser
331          930                 935                 940
333      Asp Tyr Ser Ser Tyr Ala Arg Thr Ser Ile Arg Ala Ser Leu Thr Phe
334      945                 950                 955                 960
336      Asn Arg Gly Phe Lys Ala Gly Arg Asn Met Arg Arg Lys Leu Phe Gly
337                      965                 970                 975
339      Val Leu Arg Leu Lys Cys His Ser Leu Phe Leu Asp Leu Gln Val Asn
340                   980                 985                 990
342      Ser Leu Gln Thr Val Cys Thr Asn Ile Tyr Lys Ile Leu Leu Leu Gln
343               995                1000                1005
345      Ala Tyr Arg Phe His Ala Cys Val Leu Gln Leu Pro Phe His Gln Gln
346          1010                1015                1020
348      Val Trp Lys Asn Pro Thr Phe Phe Leu Arg Val Ile Ser Asp Thr Ala
349      1025                1030                1035                1040
351      Ser Leu Cys Tyr Ser Ile Leu Lys Ala Lys Asn Ala Gly Met Ser Leu
352                      1045                1050                1055
354      Gly Ala Lys Gly Ala Ala Gly Pro Leu Pro Ser Glu Ala Val Gln Trp
355                   1060                1065                1070
357      Leu Cys His Gln Ala Phe Leu Leu Lys Leu Thr Arg His Arg Val Thr
358               1075                1080                1085
360      Tyr Val Pro Leu Leu Gly Ser Leu Arg Thr Ala Gln Thr Gln Leu Ser
361          1090                1095                1100
363      Arg Lys Leu Pro Gly Thr Thr Leu Thr Ala Leu Glu Ala Ala Ala Asn
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positions in
     1280       SEQ ID NO: 1. Nucleotide positions 3819 to 4012 are identical to
     1281       positions 3449 to 4042 in SEQ ID NO: 1.
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found only 3470 in Seq. 1

RAW SEQUENCE LISTING DATE: 03/19/2003
PATENT APPLICATION: US/09/424,686D TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

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1327 aggccagcag tggcctcttc gacgtcttcc tacgcttcat gtgccaccac gccgtgcgca 2520
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1329 tgctctgcag cctgtgctac ggcgacatgg agaacaagct gtttgcgggg attcggcggg 2640
1330 acgggctgct cctgcgtttg gtggatgatt tcttgttggt gacacctcac ctcacccacg 2700
1331 cgaaaacctt cctcaggacc ctggtccgag gtgtccctga gtatggctgc gtggtgaact 2760
1332 tgcggaagac agtggtgaac ttccctgtag aagacgaggc cctgggtggc acggcttttg 2820
1333 ttcagatgcc ggcccacggc ctattccccc ggtgcggcct gctgctggat acccggaccc 2880

RAW SEQUENCE LISTING DATE: 03/19/2003
PATENT APPLICATION: US/09/424,686D TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

1334 tggaggtgca gagcgactac tccagctatg cccggacctc catcagagcc agtctcacct 2940
1335 tcaaccgcgg cttcaaggct gggaggaaca tgcgtcgcaa actctttggg gtcttgcggc 3000
1336 tgaagtgtca cagcctgttt ctggatttgc aggtgaacag cctccagacg gtgtgcacca 3060
1337 acatctacaa gatcctcctg ctgcaggcgt acaggtttca cgcatgtgtg ctgcagctcc 3120
1338 catttcatca gcaagtttgg aagaacccca cattttcct gcgcgtcatc tctgacacgg 3180
1339 cctccctctg ctactccatc ctgaaagcca agaacgcagg tatgtgcagg tgcctggcct 3240
1340 cagtggcagc agtgcctgcc tgctggtgtt agtgtgtcag gagactgagt gaatctgggc 3300
1341 ttaggaagtt cttacccctt ttcgcatcag gaagtggttt aacccaacca ctgtcaggct 3360
1342 cgtctgcccg ccctctcgtg gggtgagcag agcacctgat ggaagggaca ggagctgtct 3420
1343 gggagctgcc atccttccca ccttgctctg cctggggaag cgctgggggg cctggtctct 3480
1344 cctgtttgcc ccatggtggg atttgggggg cctggcctct cctgtttgcc ctgtggtggg 3540
1345 attgggctgt ctcccgtcca tggcacttag ggcccttgtg caaacccagg ccaagggctt 3600
1346 aggaggaggc caggcccagg ctaccccacc cctctcagga gcagaggccg cgtatcacca 3660
1347 cgacagagcc ccgcgccgtc ctctgcttcc cagtcaccgt cctctgcccc tggacacttt 3720
1348 gtccagcatc agggaggttt ctgatccgtc tgaaattcaa gccatgtcga acctgcggtc 3780
1349 ctgagcttaa cagcttctac tttctgttct ttctgtgttg tggagaccct gagaaggacc 3840
1350 ctgggagctc tgggaatttg gagtgaccaa aggtgtgccc tgtacacagg cgaggaccct 3900
1351 gcacctggat gggggtccct gtgggtcaaa ttgggggggag gtgctgtggg agtaaaatac 3960
1352 tgaatatatg agtttttcag ttttgaaaaa aaaaaaaaaa aaaaaaaaaa aa 4012

E--> 1357 25
E--> 1361 25 - delete

VERIFICATION SUMMARY DATE: 03/19/2003
PATENT APPLICATION: **US/09/424,686D** TIME: 13:04:53

Input Set : **A:\PTO.VSK.txt**
Output Set: **N:\CRF4\03192003\I424686D.raw**

L:147 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:3470 SEQ:1
L:147 M:252 E: No. of Seq. differs, <211> LENGTH:Input:4042 Found:3470 SEQ:1
L:155 M:282 E: Numeric Field Identifier Missing, <210> is required.
L:155 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:1 differs:2
L:369 M:214 E: (33) Seq.# missing, SEQ ID NO:2
L:706 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:852 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9
L:1000 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10
L:1148 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11
L:1277 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12
L:1357 M:254 E: No. of Bases conflict, this line has no nucleotides.
M:254 Repeated in SeqNo=12
L:1361 M:252 E: No. of Seq. differs, <211> LENGTH:Input:4042 Found:4012 SEQ:12
L:23 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (7) Counted (12)